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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/954,507

09/12/2001

Richard A. Howes

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07/05/2005

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2001 ROSS AVENUE

SUITE 600

DALLAS, TX 75201-2980

EXAMINER

MEHRA, INDER P

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,507

Applicant(s)

HOWES ET AL.

Examiner

Inder P. Mehra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This is in response to amendment dated 2/28/2005.

Specification

2. The disclosure is objected to because of the following informalities:
 - a. Refer to page 11, line 5. "SYN" packet has been used first time here in specification. There is no explanation as to its meaning. what "SYN" stand for?. Coile II and Coile I do not discuss its acronym, as to what it stands for. Does it mean synchronous?

Appropriate correction is required.

Information Disclosure Statement

3. The information disclosure statement filed *10/9/01* filed originally was duplicate. IDS filed on 2/20/2002 was considered.

Oath/Declaration

4. Oath/Declaration was not received with application.
Appropriate action be taken to provide it.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-18 of U.S. Patent No. 6,366,558. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

7. For claims 1-18, the claims 1-6 of patent number 6,366,558 disclose A fault tolerant connection manager system (maintain connection) comprising:

an active connection manager that implements a virtual machine on a physical machine by translating destination IP addresses of incoming packets that have a packet source address that matches a designated foreign IP address and a packet destination address that matches a designated virtual IP address into a designated physical IP address, see claims 1 and 4, (changing the standby connection manager to an active state and translating the destination IP address ----- physical IP address, **as recited in claims 1, 2 and 18**);

a standby configuration connection that transfers configuration information about the virtual machine and the physical machine from the active connection manager to a standby connection

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manager (replication packet at a standby connection manager----from active connection manager, **as recited by claims 1, 5 and 18**); and

the standby connection manager configured to implement the virtual machine on the physical machine, the standby connection manager including a standby connection object that includes the designated foreign IP address, the designated virtual IP address and the designated physical IP address from the replication packet on the standby connection manager (see claim 1), (receiving replication packet---includes foreign IP address, virtual IP address and physical IP address), **as recited by claims 1 and 18**.

a fault tolerant connection manager system including: wherein the active connection manager is configured to send the standby connection manager a replication packet and the replication packet includes the designated foreign IP address, the designated virtual IP address and the designated physical IP address (see claim 2),(receiving configuration information – standby connection manager---), **as recited by claims 12 and 13**.

means for an active connection manager that implements a virtual machine on a physical machine by translating destination IP addresses of incoming packets that have a packet source address that matches a designated foreign IP address and a packet destination address that matches a designated virtual IP address into a designated physical IP address, see claim 3);

means for a standby configuration connection that transfers configuration information about the virtual machine and the physical machine from the active connection manager to the standby connection manager; see claim 3, (receiving configuration information - ---, **as recited by claims 12-13**).

For claims 1-18, the claim 14 of Howes' patent number 6,445,704 discloses "A method of virtualizing a locally initiated outbound connection from a physical machine as recited in claim 1 wherein the outbound connection from the physical machine is counted along with inbound connections made to the physical machine for the purpose of **load balancing** new incoming connections", (wherein the physical machine wherein new connections are distributed to the physical machine using a load balancing scheme that depends on the number of connections made to the physical machine, **as recited by claim 11**).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Howes et al** (U.S. Patent No. 6,366,558), hereinafter, Howes in view of **Lin et al** (US patent No. 5,713,017), hereinafter, Lin.

For claim 3, Howe discloses all limitations of subject matter, with the exception of the following limitations, which are disclosed by Lin, as follows:

- "updating a physical machine counter in the physical machine object when a replication packet is received that includes the physical IP address", (refer to replicated servers (physical machines) with IP address, col. 4 line 66 through col. 5 line 1, and update of counters col. 7 lines 1-5.

It would have been obvious to a person of ordinary skill to combine the capability of “updating physical machine counter when a replication packet is received including IP address, as taught by Lin. This capability can be combined in the physical machine of Howes. The suggestion to do so is motivated in order to keep track of the largest sequence number of requests which have been completed on the server (physical machine).

10. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Howes et al** (U.S. Patent No. 6,366,558), hereinafter, Howes in view of **Oliver et al** (US patent No. 5,491,694), hereinafter, Oliver.

For claims 14 and 15, Howe discloses all limitations of subject matter, with the exception of the following limitations, which are disclosed by Oliver, as follows:

- “wherein the replication object also includes a virtual machine port number, as **recited by claim 14**, refer to fig. 1, col. 7 line 65 – col. 8 line 25 and col. 17 line 40-col. 18 line 17 .
- wherein the replication object also includes a physical machine port number, as **recited by claim 14**, refer to col. 17 line 40-col. 18 line 17, fig. 9, and col. 26 lines 25-30.

It would have been obvious to a person of ordinary skill to combine the capability Of “the replication object also includes a virtual machine port number and a physical machine port number. This capability can be combined in the physical machine of Howes. The

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suggestion to do so is motivated in order to keep track of the largest sequence number of requests which have been completed on the server (physical machine).

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Howes et al** (U.S. Patent No. 6,366,558), hereinafter, Howes in view of **Monteiro et al** (US patent No. 6,434,622), hereinafter, Montairo.

For claim16, Howe discloses all limitations of subject matter, with the exception of the following limitations, which are disclosed by Montairo, as follows:

- “wherein the replication object also includes a foreign port number”, **as recited by claim 16**, refer to col. 1 lines 44-50, and col. 8 line 45-col. 9 line 35.

It would have been obvious to a person of ordinary skill to combine the capability Of “the replication object also includes a foreign port number”, This capability can be combined in the physical machine of Howes. The suggestion to do so is motivated in order to keep track of the largest sequence number of requests which have been completed on the server (physical machine).

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Howes et al** (U.S. Patent No. 6,366,558), hereinafter, Howes in view of **Beeler Jr. et al** (US patent No.5,819,020), hereinafter, Beeler.

For claim17, Howe discloses all limitations of subject matter, with the exception of the following limitations, which are disclosed by Beeler Jr., as follows:

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* "checking the size of the replication packet, **as recited by claim 17**, refer to col. 15 lines 50-57.

It would have been obvious to a person of ordinary skill to combine the capability Of "checking the size of the replication packet", This capability can be combined in the physical machine of Howes. The suggestion to do so is motivated in order to keep track of the largest sequence number of requests which have been completed on the server (physical machine).

Allowable Subject Matter

13. Claims 4 and 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

14. Applicant's arguments filed 2/20/2005 have been fully considered but they are not persuasive.

Applicant argues, " Applicants respectfully note that none of Claims 1-6 of the '558 Patent recites any "physical machine object that stores a physical IP address of a physical machine that is available to the active connection manager" or any "virtual machine object" that stores a virtual IP address of a virtual machine that is implemented on the active connection manager." As a result, none of Claims 1-6 of the '558 Patent is coextensive in scope with Claim 1 of the present Application.

In response it is stated that '704 (US Patent No. 6,445,704) disclose explicitly,

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“a processor; and computer memory accessible by the processor and configured to store computer code executable by the processor, ---providing a *virtual machine object* having a virtual IP address that corresponds to the virtual machine wherein inbound connections directed to the virtual machine are handled by the physical machine having a physical machine IP address; providing a static physical machine object wherein the *static physical machine object* contains the virtual IP address and the physical machine IP address----”, refer to claim 32, col. 17 lines 35-50;

Further, ‘349 (US Patent No. 6,061,349) discloses “wherein the connection objects are stored in a linked list, see claim 3, col. 15, lines 64-65; “a virtual machine **database** including a plurality of **virtual machine objects**, each virtual machine object including a virtual machine object IP address and a virtual machine object port number for a virtual machine supported by the packet translation system, refer to claim 5 of ‘349, col. 16 lines 4-9; claim 6 of ‘349 recites, “a system as recited in claim 5 wherein the plurality of **virtual machine objects** are stored in a linked list”; claim 7 of ‘349 recites. “ system as recited in claim 1, further including a physical machine database including a plurality of physical machine objects including a physical machine object IP address for each physical machine available to the packet translation system”, refer to col. 16 lines 10-15.

In light of above explanation, arguments by applicant are not persuasive.

15. Applicant's amendment to claims 1-17 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder Pal Mehra
Inder P Mehra
Examiner
Art Unit 2666
6/22/05

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